



RESOURCE TECHNOLOGIES OF POTATO CONSTRUCTION

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Annotation. The article fully covers the effectiveness of the use of drip irrigation based on resource-intensive technologies as irrigation work and its solution in growing potatoes

Key words. New technologies, reurstejamcore technologies, drip irrigation, innovations.

As you know, today the current problem is the development of ways to reduce the cost of potato seed materials in all countries of the world producing vegetables and potatoes, an accelerated increase in the fertility of the newly created promising varieties.

For many farms and dekhkan farms in Uzbekistan, potato cultivation is one of the sources of income. In our country, potatoes from food crops are ranked 3rd after wheat and wheat. Per capita, 45 kg of potatoes are consumed per year. To meet the requirements of the country's population for potatoes, it is necessary to increase the volume of cultivation. Given the limitations of water poisons, this is one of the main obstacles to increasing potato yields. Therefore, an important factor determining efficiency is water saving, the introduction of resource-saving technologies into production.

The application of arid varieties, the use of water-saving technologies will help increase potato yields by 40 percent. Currently, farmers are showing interest in new varieties of potatoes and resource-intensive irrigation technologies.

The cultivation of potatoes based on innovative technologies involves the widespread use of a drip irrigation system. The efficiency and cost-effectiveness of this technology are high. The technology of drip irrigation of potatoes in comparison with the existing irrigation system allows you to save water resources (from 50% to 90%).

Drip irrigation is widely used in many countries. In general, more than 1.2 million crops are watered around the world. In US farms, 888 thousand hectares of land will be irrigated by drip irrigation. In Spain, this figure is 34 thousand, in Israel - more than 100 thousand, in Australia - about 50





thousand, in Italy - 32 thousand, in France - 20 thousand, in China - 20 thousand, in South Korea - 15 thousand. In the State of Israel, irrigation methods for 100% of crops are used, which can be saved on a drip, lubricant and other water resources operating under pressure created by pumping stations

Of great importance is the efficient use of water resources with an annual shortage, saving mineral fertilizers, reducing the processing of a number of crops, reducing the number of workers engaged in irrigation, and increasing the irrigation culture. Therefore, in our country, great attention is paid to the drip irrigation method.

Experts believe that 80% of the world's water sources are used in a rural cage. This is no coincidence, since when growing agricultural cell crops, it is especially necessary to water crops in arid climatic regions.

In recent years, water shortages have caused serious problems in Central Asia, including Uzbekistan, and in water distribution relations between the states of the region. One of the main reasons for the water shortage is that the volume of water resources formed in Amu Darya and Syr Darya is no more than 70% of the average annual volume. Further growth of water intake and aggravation of the problem require the transition to water intake technologies in the rural cell of the main water consumer.

In most countries, the advantage of drip irrigation has been proven that: reducing labor, energy and resources costs, the possibility of using other irrigation methods in the absence of other methods, for example, the use of gray water on deep-sea lands, in vertical deposits, on light-engine soils.

The decrease in the standards for seasonal irrigation of drip irrigation compared to traditional methods is 50% or more, the convenience of providing mineral fertilizers for obtaining the planned maximum yields, watering with high-sulfur water, use in non-metallic fields, the possibility of using small production sources of water and local wastewater.

The drip irrigation system is technically complex and costly. If the system for existing conditions is not implemented on the basis of direct accounts, it can lead to negative consequences, that is, the resources spent (funds, labor, material) will not give the expected result. The use of comprehensive drip irrigation can not only lead to an uncompromising loss of spent funds, but also harm the environment.





Currently, Israel, the USA, France, Italy, China, South Korea and Turkey are leading in the production of drip irrigation systems. And in our country, the enterprises "SANIPLAST" and "MAXUSPOLIMER" collect on the ground and introduce parts of imported drip irrigation systems into the rural cage.

Drip irrigation is a way to save water and fertilizers. In this system, water is transferred to the root of plants as drops, pipes with drip valves transmitting water are used on the soil surface. This method is widespread in countries with criticism of water resources.

Positive agrotechnical properties of drip irrigation include:

- possibility to control moisture depth;
- reducing the contamination of plants with cash registers;
- repression will be prevented on the basis, there will be no cost of mitigating repression;
- reducing the number of foreign trees;
- growing high yields in exchange for direct distribution of water over the period of growth and reducing agitation to 15-35%;
- Ground water pollution and secondary soil icing will be prevented.

Potato cultivation based on intensive technologies is associated with the use of a drip irrigation system with high economic and technological efficiency.

Drip irrigation has been known since ancient times. In the old days, holes were made from soopoly canvases, through which water slowly seeped, and she took care of watering plants. The modern drip irrigation system was first applied in Afghanistan in 1886, when researchers conducted experiments on the use of oval pipes to create irrigation drainage systems. In 1913, scientists at Colorado State University used this method to water plants. In the 1920s and 1930s, tubes with holes were used in Germany, studies with hoses were carried out in the United States.

When using a drop system, the yield of potatoes is 60-80 tons per hectare. 140 cm will be obtained between them - this is 70 talik, two compressors will be combined and 1 drip irrigation will be installed. In order to obtain potatoes of a fabulous harvest, cucumbers are marked with a film. First, 140-inch cucumbers will be made, then a drip irrigation tape will be installed on them, and film on top. Potatoes will be planted with the help of machines for surface owners.





Machinery breaks through the film and lands the mugs. This technology helped heat the soil faster. The fight against other people's herbs is not carried out. Drip irrigation technology gives a good harvest and a high economic effect.

1. The soil is not subjected to excessive hydration, which ensures active breathing of the roots during the growth period.
2. Unlike other irrigation methods, the root system develops more strongly.
3. Together with watering rhizomes, waterfowl fertilizers are given. The development of feed eliminations by the roots is fast and active.

Unlike rain irrigation methods, the leaves of the plant are not subjected to excessive moisture, the spread of cassans is reduced. The insecticides and fungicides used are not washed from the leaves. When the drip irrigation system is used, the soil surface remains dry during the growth period, and soil cultivation is carried out regardless of the time of sowing and watering the crop of plants. There will be no beds on the soil, their structure will be preserved.

Land plots with complex topography provide irrigation organization without specific devices. With drip irrigation, moisture humidification does not exceed 5%, and on lubricating machines this loss reaches 40-50%.

With drip irrigation, the soil temperature will be higher than with rain irrigation, and the fairy tale will provide a harvest.

Labor costs for watering are reduced. Drip irrigation and fertigation increase yields. Costs are quickly compensated, production costs are reduced to 1.5-2.5%

There are several methods of irrigation of potatoes, and today one of the effective methods is drip irrigation, agronomists noted.

The first and main advantage of drip irrigation is water savings, which save up to 50% of water compared to the usual method.

Method of potato drip irrigation ensures high soil aeration, soil does not overheat, improves breathing of root system of oxygen plants on soil.

Drip irrigation of potatoes contributes to the growth of the root system, which, in turn, creates conditions for the development of moist and nutritious elements by plant soil. Together with drip irrigation, a root system is located, shoots necessary for vegetation are supplied to the soil





layers. In arid conditions, this method ensures good plant growth. The use of a sprinkler irrigation system in the cultivation of potatoes is economically viable. Because the yield increases, keeping the right moisture in the soil. As a result of a decrease in soil temperature, high and high-quality yields are obtained.

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